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#### Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

#### Listing of Claims

1. (Original) A method for inhibiting thrombosis in a patient whose blood is subjected to extracorporeal blood circulation which comprises contacting or admixing with the extracorporeal circulating blood with a Factor IXa compound in an amount effective to inhibit thrombosis in the patient.
- 2-8 (Canceled)
9. (Original) A pharmaceutical composition which comprises an effective amount of a Factor IXa compound and a pharmaceutically acceptable carrier.
- 10-12 (Canceled)
13. (Original) An assay to monitor antithrombic activity of a Factor IXa compound infused into circulation of a patient which comprises:
  - (a) obtaining Factor IXa-deficient plasma;
  - (b) mixing the plasma from step (a) with a diatomaceous earth and with plasma from the patient;
  - (c) incubating the mixture with a source of lipid and calcium

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chloride under conditions suitable for clot formation;  
and

- (d) measuring time necessary for clot formation in the incubate, thereby monitoring the antithrombic activity of the Factor IXa compound infused into the circulation of the patient.

14. (Original) A method for evaluating the ability of an agent to inhibit an active site of a Factor IXa compound which comprises:

- (a) contacting the Factor IXa compound with the agent to form a protein complex;
- (b) incubating the protein complex under conditions suitable for clot formation;
- (c) measuring time necessary for clot formation in the incubate; and
- (d) comparing the time measured in step (c) with the time measured in the absence of the agent, thus evaluating the ability of the agent to inhibit the active site of the Factor IXa compound.

15-18 (Canceled)

19. (Original) An agent obtained from the method of claim 14, which agent is capable of inhibiting the active site of Factor IX.

20. (Original) A method for inhibiting thrombosis in a patient

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whose blood is subjected to extracorporeal blood circulation which comprises contacting or admixing with the extracorporeal circulating blood with an agent capable of inhibiting a step of the intrinsic pathway of coagulation in an amount effective to inhibit thrombosis in the patient.

23. (Original) An assay to determine the anticoagulant activity of a Factor IXa compound on a subject's blood which comprises:
- (a) mixing Factor IX deficient plasma, diatomaceous earth and plasma containing the Factor IXa compound derived from the subject's blood;
  - (b) incubating the resulting mixture from step (a) with an effective dose of a source of phospholipid and calcium chloride under conditions such that clot formation results; and
  - (c) measuring the time necessary for clot formation in the incubate of step (b) so as to thereby determine the anticoagulant of the Factor IXa.
24. (Original) An assay of claim 23, further comprising comparing the time necessary for clot formation measured in step (c) with the time necessary for clot formation measured in the absence of the Factor IXa compound.
25. (Original) An assay of claim 23, wherein the subject is a human patient.
26. (Original) An assay of claim 23, wherein the Factor IXa

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compound is a functionally inactive form of Factor IXa.

27. (Original) An assay of claim 26, wherein the functionally inactive form of Factor IXa is a Factor IXa in which the active serine amino acid has been altered.
28. (Original) A method for monitoring the anticoagulant activity of a Factor IXa compound which is being infused into the circulation of a subject's blood during surgery which comprises measuring the anticoagulant activity of the Factor IXa compound at different times during the surgery using the assay of claim 23 and comparing the activities so measured.
- 29-32 (Canceled)
33. (Amended) A method for inhibiting thrombosis in a human patient which comprises administering to the patient, or adding to blood which is to be administered to the patient, a Factor IXa compound in the amount which is effective to inhibit thrombosis but which does not significantly interfere with [hemostasis] ~~hemostasis~~ in the patient.
34. (Original) A method of inhibiting clot formation in extracorporeal human blood which comprises adding to the blood an amount of a Factor IXa compound in an amount effective to inhibit clot formation but which does not significantly interfere with hemostasis when the blood is administered to a patient.